

All pending claims are listed below:

**Listing of Pending Claims:**

1. (Currently Amended) A method of treating a subject suffering from ~~a herpes virus infection or~~ a disease associated with a herpes virus infection comprising: administering to the subject a therapeutically effective amount of a peptide exhibiting mammalian alpha-1 antitrypsin (AAT) or AAT-like activity ~~in combination with a therapeutically effective amount of an antiviral nucleoside derivative comprising vidarabine, azidothymidine, ganciclovir or a combination thereof.~~

2. (Original) The method of claim 1 in which said disease is malaise, fever, chills, rhinitis, diarrhea, atopic eczema, encephalitis, keratoconjunctivitis, pharyngitis, gingivostomatitis, herpetic hepatitis, recurrent orofacial mucocutaneous lesions or herpes labialis, chicken pox skin sores, erythema multiforme, idiopathic burning mouth, aphthous ulceration, Behcet's syndrome, or combinations thereof.

3. (Original) The method of claim 1 in which said disease is mononucleosis, Burkitt's lymphoma, primary effusion lymphomas, multiple myeloma, angioimmunoblastic lymphadenopathy, Castleman's disease, acquired immune deficiency syndrome (AIDS)-related lymphoma, post-transplantation lymphoproliferative disease, Hodgkin's disease, T-cell lymphomas, oral hairy leukoplakia, lymphoproliferative disease, lymphoepithelial carcinoma, body-cavity-based lymphoma or B-cell lymphomas, non-keratinising carcinoma, squamous cell nasopharyngeal carcinoma, kidney transplant-associated epithelial tumors, malignant mesothelioma, angiosarcoma, Kaposi's sarcoma, angiolymphoid hyperplasia, prostatic neoplasm, cervical cancer, neoplasms of the vulva, retinoblastoma, Li-Fraumeni syndrome, Gardner's syndrome, Werner's syndrome, nervoid basal cell carcinoma syndrome, neurofibromatosis type 1, or combinations thereof.

4. (Original) The method of claim 1 in which said disease is polyneuropathy, motor neuropathy, sensory neuronopathy, polyradiculoneuropathy, autonomic neuropathy, focal or multi focal cranial neuropathy, radiculopathy, plexopathy resulting from tumor infiltration, or combinations thereof.

5. (Previously Presented) The method of claim 1 in which the peptide comprises AAT.
6. (Original) The method of claim 5 in which the AAT is substantially purified from a wild type, mutant, or transgenic mammalian source.
7. (Original) The method of claim 5 in which the AAT is isolated from a culture of wild type, mutant, or transformed cells.
8. (Original) The method of claim 1 in which the herpes virus comprises a virus selected from the group consisting of herpes simplex virus type I (HSV-1), herpes simplex virus type II (HSV-2), cytomegalovirus (CMV), Epstein-Barr virus (EBV), varicella zoster virus (VZV), herpes zoster virus, human herpes virus type V (HHV-5), human herpes virus type VI (HHV-6), human herpes virus type VIII (HHV-8), and combinations thereof.
9. (Cancelled).
10. (Withdrawn— Previously Presented) The method of claim 1 in which the peptide is of the general formula:  $N_T-X_1-X_2-X_3-X_4-X_5-C_T$  or a physiologically acceptable salt thereof, in which  $N_T$  comprises an amino acid residue positioned at the peptide's N-terminal end, including C, an acetyl group, or a succinyl group, provided that  $N_T$  can also be absent;  $X_1$  comprises an amino acid residue, including F or A;  $X_2$  comprises an amino acid residue, including C, V, L, M, I, A, C, or S;  $X_3$  comprises an amino acid residue, including F, A, V, M, L, I, Y, or C;  $X_4$  comprises an amino acid residue, including L, A, F, I, V, M, C, G, or S;  $X_5$  comprises an amino acid residue, including M, A, I, L, V, F, or G; and  $C_T$  comprises an amino acid residue positioned at the peptide's C-terminal end, including C, an amide group, a substituted amide group, or an ester group, provided that  $C_T$  can also be absent, and in which the amino acid residue can be either an L- or a D-stereoisomeric configuration.
11. (Withdrawn— Previously Presented) The method of claim 1 in which the therapeutically effective amount of the peptide exhibiting mammalian alpha-1-antitrypsin (AAT) or AAT-like activity is in the range of about 1 mg per kg to about 100 mg per kg of body weight of the mammalian subject.
12. (Original) The method of claim 1 in which the therapeutically effective amount of the substance is administered systemically or topically.

13-15. (Cancelled)

16. (Withdrawn—Currently Amended) A pharmaceutical composition for the treatment of a **disease associated with** herpes virus infection, which comprises a peptide of the general formula:  $N_T-X_1-X_2-X_3-X_4-X_5-C_T$  or a physiologically acceptable salt thereof, in which  $N_T$  comprises an amino acid residue positioned at the peptide's N-terminal end, including C, an acetyl group, or a succinyl group, provided that  $N_T$  can also be absent;  $X_1$  comprises an amino acid residue, including F or A;  $X_2$  comprises an amino acid residue, including C, V, L, M, I, A, C, or S;  $X_3$  comprises an amino acid residue, including F, A, V, M, L, I, Y, or C;  $X_4$  comprises an amino acid residue, including L, A, F, I, V, M, C, G, or S;  $X_5$  comprises an amino acid residue, including M, A, I, L, V, F, or G; and  $C_T$  comprises an amino acid residue positioned at the peptide's C-terminal end, including C, an amide group, a substituted amide group, or an ester group, provided that  $C_T$  can also be absent, and in which the amino acid residue can be either an L- or a D-stereoisomeric configuration.

17-27. (Cancelled).

28. (Withdrawn—Currently Amended) A method for treating ~~or preventing herpes,~~ **disease associated with a herpes virus infection** comprising administering to a patient in need thereof an effective amount of a substance exhibiting AAT- or AAT-like activity, wherein said substance comprises a peptide selected from **group consisting of** FVFLM (SEQ. ID NO.1), FVFAM (SEQ. ID NO.2), FV ALM (SEQ. ID NO.3), FVFLA (SEQ. ID NO.4), FLVFI (SEQ. ID NO.5), FLMII (SEQ. ID NO.6), FLFVL (SEQ. ID NO.7), FLFVV (SEQ. ID NO.8), FLFLI (SEQ. ID NO.9), FLFFI (SEQ. ID NO. 10), FLMFI (SEQ. ID NO. 11), FMLLI (SEQ. ID NO. 12), FIIMI (SEQ. ID NO. 13), FLFCI (SEQ. ID NO. 14), FLFA V (SEQ. ID NO. 15), FVYLI (SEQ. ID NO. 16), FAFLM (SEQ. ID NO. 17), AVFLM (SEQ. ID NO. 18), FCICV (SEQ. ID NO. 19), FCVCF (SEQ. ID NO. 20), FIVCV (SEQ. ID NO. 21), FCVGV (SEQ. ID NO. 22), FCVLV (SEQ. ID NO. 23), FLVGV (SEQ. ID NO. 24), FSVSV (SEQ. ID NO. 25), FSVCV (SEQ. ID NO. 26), FVCVG (SEQ. ID NO. 27), ~~or combinations~~ **and a combination** thereof.

29-30. (Cancelled).

31. (Withdrawn— Previously Presented) A method of preventing sexually transmitted diseases comprising administering intravaginally or intrarectally an effective amount of a composition comprising (1) a substance having AAT- or AAT-like activity or a derivative

thereof capable of inhibiting caspase, proteinase-3, cathepsin G, elastase, or combinations thereof and (2) a second compound selected from anesthetics, analgesics, antibiotics, or combinations thereof.

32-37. (Cancelled)

38. (Withdrawn) A method of preventing or inhibiting entry of herpes viral nucleic acid into a mammalian host cell nucleus, which comprises administering to a mammalian host exposed or at risk of potential exposure to an agent harboring herpes viral nucleic acid an effective amount of a substance exhibiting mammalian alpha-1-antitrypsin (AAT) or AAT-like activity.

39. (Withdrawn) The method of claim 38 in which the entry of said herpes viral nucleic acid is mediated by endogenous host serine protease (SP) or SP-like activity.

40. (Previously Presented) The method of Claim 1, wherein the peptide comprises FVFLM (SEQ. ID NO.1), FVFAM (SEQ. ID NO.2), FV ALM (SEQ. ID NO.3), FVFLA (SEQ. ID NO.4), FLVFI (SEQ. ID NO.5), FLMII (SEQ. ID NO.6), FLFVL (SEQ. ID NO.7), FLFVV (SEQ. ID NO.8), FLFLI (SEQ. ID NO.9), FLFFI (SEQ. ID NO. 10), FLMFI (SEQ. ID NO. 11), FMLLI (SEQ. ID NO. 12), FIIMI (SEQ. ID NO. 13), FLFCI (SEQ. ID NO. 14), FLFA V (SEQ. ID NO. 15), FVYLI (SEQ. ID NO. 16), FAFLM (SEQ. ID NO. 17), AVFLM (SEQ. ID NO. 18), FCICV (SEQ. ID NO. 19), FCVCF (SEQ. ID NO. 20), FIVCV (SEQ. ID NO. 21), FCVGV (SEQ. ID NO. 22), FCVLV (SEQ. ID NO. 23), FLVGV (SEQ. ID NO. 24), FSVSV (SEQ. ID NO. 25), FSVCV (SEQ. ID NO. 26), FVCVG (SEQ. ID NO. 27), or a combination of two or more thereof.

41. (New) A method for preventing an outbreak of disease associated with herpes virus infection in a subject infected with herpes virus, said method comprising administering to the subject a composition comprising a substance exhibiting  $\alpha_1$ -antitrypsin (AAT) or AAT-like activity.